herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

1. (Amended) A radio frequency ("RF") power amplifier with high output efficiency operating in a switched mode at a predetermined frequency band, said amplifier comprising:

a semiconductor device having a control terminal and two conducting terminals, said semiconductor device capable of a conductive state and a nonconductive state, wherein said control terminal controls the conductance across said two conducting terminals, wherein a first of said two conducting terminals is tied to ground potential, wherein a second of said two conducting terminals comprises the output of said amplifier;

a RF source coupled to said control terminal of said semiconductor device; and

a subharmonic filter coupled to said second of said two conducting terminals, the subharmonic filter having a passband that passes subharmonic frequencies of a fundamental frequency of a baseband signal produced at said second of said conducting terminals to a termination circuit and substantially blocks the baseband signal at the fundamental frequency

11. (Amended) The RF amplifier of claim 1 wherein said subharmonic filter includes a low pass filter that has said termination circuit for terminating subharmonic signals, said termination circuit coupling said subharmonic filter to ground potential.

12. (Amended) The RF power amplifier of claim 14 wherein said resonant inductor circuit comprises:

an inductor; and

a DC voltage source coupled to said inductor.

13. (Amended) The RF power amplifier of claim 14 wherein said resonant inductor circuit modifies the load impedance of said semiconductor device in said conductive state.

14. (Twice Amended) The RF power amplifier of claim 1 further including a resonant inductor circuit coupled to said second of said conducting terminals, said resonant inductor circuit for eliminating the capacitance between said two conducting terminals when said semiconductor device is in said nonconductive state, and a low frequency termination circuit coupled to said second conducting terminal through said resonant inductor circuit.

15. (Amended) The RF amplifier of claim 14 wherein said low frequency termination circuit provides controlled impedance for the baseband signal at the fundamental frequency.

21. (Amended) A radio frequency ("RF") power amplifier with high output efficiency operating in a switched mode at a predetermined frequency band, said amplifier comprising:

a discrete transistor having a gate terminal, a source terminal, and a drain terminal, said drain terminal in a grounded configuration, said source terminal comprising the output of said amplifier;

a RF source coupled to said gate terminal of said discrete transistor;

a resonant inductor circuit coupled to said source terminal for eliminating the capacitance between said drain terminal and said source terminal when said discrete transistor is in an off state;

a subharmonic filter coupled between said source terminal and ground, the subharmonic filter including a low pass filter having a cutoff frequency to pass subharmonic frequencies of a fundamental frequency of a baseband signal produced at said source terminal to a termination circuit of said subharmonic filter and substantially blocks the baseband signal at the fundamental frequency; and

a low frequency termination circuit coupled to said source terminal through said resonant inductor circuit.

32. (Twice Amended) The RF power amplifier of claim 21 wherein said low frequency termination circuit includes a low pass filter having a passband that passes spurious low frequency signals and substantially blocks the baseband signal at the fundamental frequency.

33. (Amended) The RF amplifier of claim 32 wherein said low frequency termination circuit provides controlled impedance for the baseband signal at the fundamental frequency.

34. (Amended) A radio frequency ("RF") power amplifier with high output efficiency operating in a switched mode at a predetermined frequency band, said amplifier comprising:

a discrete transistor having a gate terminal, a source terminal, and a drain terminal, said source terminal in a grounded configuration, said drain terminal comprising the output of said amplifier;

a RF source coupled to said gate terminal of said discrete transistor; and

a subharmonic filter coupled to said drain terminal and ground, the subharmonic filter having a passband that passes subharmonic frequencies of a fundamental frequency of a baseband signal produced at said drain terminal to a termination circuit and substantially blocks the baseband signal at the fundamental frequency.

44 38. (Amended) The RF power amplifier of claim 45 wherein said resonant inductor circuit comprises:

an inductor; and

a DC voltage source coupled to said inductor.

45 ~~44~~. (Amended) The RF power amplifier of claim 45 wherein said resonant inductor circuit modifies the load impedance of said discrete transistor in said conductive state.

38 ~~45~~. (Twice Amended) The RF power amplifier of claim 34 further including a resonant inductor circuit coupled to said drain, said resonant inductor circuit for eliminating the capacitance between said drain terminal and said source terminal when the discrete transistor is in an off state, and a low frequency termination circuit coupled to said second conducting terminal through said resonant inductor circuit.

46. (Amended) The RF amplifier of claim 45 wherein said low frequency termination circuit provides controlled impedance for the baseband signal at the fundamental frequency.

Please add new claims 47 – 57 as follows:

47. (New) The RF amplifier of claim 14 wherein said subharmonic filter includes a low pass filter that has said termination circuit for terminating subharmonic signals, said termination circuit coupling said subharmonic filter to ground potential.

48. (New) The RF amplifier of claim 14 wherein said termination circuit for terminating subharmonic signals comprises a resistance.

49. (New) The RF amplifier of claim 14 wherein the RF amplifier is a class E amplifier without RF broadband feedback.

50. (New) The RF amplifier of claim 1 wherein said first of said two conducting terminals is tied to ground potential through an inductor.

51. (New) The RF amplifier of claim 21 wherein the RF amplifier is a class E amplifier without broadband RF feedback.

52. (New) The RF amplifier of claim 21 wherein the termination circuit for terminating subharmonic frequencies is a resistance.

53. (New) The RF amplifier of claim 45 wherein said subharmonic filter includes a low pass filter that has said termination circuit for terminating subharmonic signals, said termination circuit coupling said subharmonic filter to ground potential.

54. (New) The RF amplifier of claim 53 wherein the termination circuit for terminating subharmonic signals comprises a resistance.

55. (New) The RF amplifier of claim 45 wherein the RF amplifier is a class E amplifier without broadband RF feedback.

56. (New) The RF amplifier of claim 14 wherein said low frequency termination circuit includes a low pass filter having a passband that passes spurious low frequency signals and substantially blocks the baseband signal at the fundamental frequency.

57. (New) The RF amplifier of claim 45 wherein said low frequency termination circuit includes a low pass filter having a passband that passes spurious low frequency signals and substantially blocks the baseband signal at the fundamental frequency.